

CLAIMS

What is claimed is:

1. A multilumen catheter assembly comprising:

an elongated body having a proximal end and a distal end;

a first lumen having:

a sidewall extending between the proximal end and the distal end;

a first distal opening disposed at the distal end; and

a first guide wire opening disposed proximally of the distal end and co-planar with the sidewall;

and

a second lumen connected to the sidewall and extending between the proximal end and a second distal end, proximal of the distal end, wherein the second lumen includes:

a second opening extending obliquely away from the sidewall distally toward the first opening; and

a second guide wire opening disposed proximally of the second opening and in a plane generally parallel to the sidewall.

2. The multilumen catheter assembly according to claim 1, further comprising a hub connected to the proximal end of the body.

3. The multilumen catheter assembly according to claim 1, wherein the first lumen further comprises at least one opening disposed proximate of the distal end.

4. The multilumen catheter assembly according to claim 1, wherein the first distal opening is disposed in a plane generally perpendicular to a plane of the sidewall.

5. The multilumen catheter assembly according to claim 1, wherein the first distal opening is generally circular.
6. The multilumen catheter assembly according to claim 1, wherein the first lumen has a generally D-shaped cross section proximate of the second opening.
7. The multilumen catheter assembly according to claim 1, wherein the second lumen has a generally D-shaped cross section.
8. The multilumen catheter assembly according to claim 1, wherein the body has a generally round cross-section.
9. The multilumen catheter assembly according to claim 1, wherein the second opening is tapered.
10. The multilumen catheter assembly according to claim 1, wherein the first guide wire opening is generally oval shaped.
11. The multilumen catheter assembly according to claim 1, wherein the second guide wire opening is generally oval shaped.
12. A method of inserting a catheter over a catheter guide wire comprising:
 - providing a catheter having:
 - an elongated body having a proximal end and a distal end;
 - a first lumen having:
 - a sidewall extending between the proximal end and the distal end;
 - a first distal opening disposed at the distal end; and
 - a first guide wire opening disposed proximally of the distal end and co-planar with the sidewall;
 - and

a second lumen connected to the sidewall and extending between the proximal end and a second distal end, proximal of the distal end, wherein the second lumen includes:

a second opening extending obliquely away from the sidewall distally toward the first distal opening; and

a second guide wire opening disposed proximally of the second opening and in a plane generally parallel to the sidewall;

wherein the method further comprises:

providing a catheter guide wire having a proximal end;

inserting the proximal end of the guide wire through the first distal opening;

inserting the proximal end of the guide wire through the first lumen to the first guide wire opening;

exiting the proximal end of the guide wire from the first lumen through the first guide wire opening;

pulling the proximal end of the guide wire longitudinally along an exterior of the first lumen to the second lumen;

pulling the proximal end of the guide wire over the second lumen to the second guide wire opening;

inserting the proximal end of the guide wire through the second guide wire opening and into the second lumen;

inserting the proximal end of the guide wire through the second lumen; and

drawing the proximal end of the guide wire from the proximal end of the second lumen.

13. The method according to claim 12, further comprising, after inserting the proximal end of the guide wire through the second guide wire opening, using the guide wire to compress the second distal end of the second lumen toward the first lumen.

14. The method according to Claim 12, further comprising, after drawing the proximal end of the guide wire from the proximal end of the second lumen, inserting the distal end of the catheter into a vessel to be catheterized.

15. The method according to claim 14, further comprising, after inserting the distal end of the catheter into the vessel to be catheterized, pulling the proximal end of the guide wire away from the proximal end of the catheter and removing the guide wire from the catheter.